### DOCUMENT RESUME

ED 346 320 CE 061 410

AUTHOR Lankard, Bettina A.

TITLE Cooperative Learning in Vocational Education. Trends

and Issues Alerts.

INSTITUTION ERIC Clearinghouse on Adult, Career, and Vocational

Education, Columbus, Ohio.

SPONS AGENCY Office of Educational Research and Improvement (ED),

Washington, DC.

PUB DATE 92

CONTRACT RI88062005

NOTE 3p

PUB TYPE Information Analyses - ERIC Clearinghouse Products

(071)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Annotated Bibliographies; Classroom Techniques;

\*Cooperative Learning; Education Work Relationship;

Group Activities; \*Interpersonal Relationship;

Learning Activities; Learning Strategies;

Postsecondary Education; Secondary Education; \*Small Group Instruction; Socialization; \*Teaching Methods;

\*Teamwork; \*Vocational Education

### ABSTRACT

Cooperative learning is gaining the attention of vocational educators who must prepare students for employment in a workplace increasingly focused on teamwork. It is a model that provides opportunities for students to explore concepts and develop interpersonal skills that enhance their learning. Research shows that cooperative learning promotes higher self-esteem among students and more positive attitudes toward others. Students who participate in cooperative learning groups are reported to realize greater achievement and greater levels of understanding, to have an ability to absorb content that requires higher levels of thinking, and to be able to retain what they have learned longer. Five elements of small group learning are essential to the process: (1) positive interdependence; (2) face-to-face student interactions; (3) individual accountability; (4) social skills; and (5) group processing. Implementation of cooperative learning strategies requires teacher training and follow-up. The Johnson and Johnson model identifies the decisions involved in planning a cooperative learning group lesson: selecting tasks, determining content and accepted performance level, and selecting social skills students will learn. The teacher may require new skills to manage the classroom. (An annotated listing of 15 print resources is provided.) (YLB)

<sup>\*</sup> Reproductions supplied by EDRS are the best that can be made \*

<sup>\*</sup> from the original document. \*

01

# TRENDS AND ISSUES

# **ALERTS**

### COOPERATIVE LEARNING IN VOCATIONAL EDUCATION

Cooperative learning, as a model for instruction, is gaining the attention of vocational educators who must prepare students for employment in a workplace that is increasingly focused on teamwork. Many businesses, as well as educational institutions, have adopted the total quality management concepts promoted by Deming, Juran, Crosby, and others. Implementing practices that support these concepts requires that workers have communication, group process, and critical thinking skills as well as technical skills for the occupation. Instructional models that stress individual learning and/or competitive learning do little to integrate the learning of these socially useful skills with academic and vocational learning. However, because 74 to 80 percent of jobs require a complex coordination of effect and ideas (Long 1989) and because the work for is composed of culturally, economically, and socially at aree individuals, instruction that promotes and develor skills in cooperation and teamwork is crucial.

Cooperative learning has been defined as "a set of instructional strategies in which stridents are grouped in teams where they work together toward a common goal" (Long 1989, p. 2). It is a model that provides opportunities for students to explore concepts and develop interpersonal skills that enhance their learning. Research comparing cooperative learning to individual and competitive learning has shown that cooperative learning promotes higher selfesteem among students and more positive attitudes toward others. David Johnson, Roger Johnson, and others (Carson 1990) have reported that students who participate in cooperative learning groups realize greater achievement and greater levels of understanding of the subject matter, have an ability to absorb content that requires higher levels of thinking, and are able to retain what they have learned longer.

Five elements of small group learning are essential to the Bruening (1990) identified these elements as follows:

- Positive interdependence. Heterogenous groups learn to trust and depend on each other to achieve mutual goals, which requires sharing of information, resources, effort, and encouragement.
- · Face-to-face student interactions. Students increase their communication skills and help each other understand how tasks are completed.
- Individual accountability. Strategies that effectively promote individual as well as group accountability are desirable. One such strategy bases individual scores on bonus points awarded when all members of the group have met the established criteria. Another strategy uses a team score with extra points for individual improvement.
- Social skills. Small group interactions, conflict resolution strategies, round table discussions, and other team building activities provide an opportunity for students to develop the communication and social skills required for work in today's society.

 Group processing. Students learn to listen with respect to the opinions of others and to offer constructive criticism.

Implementation of cooperative learning strategies requires teacher training and follow-up. Among the models described by Carson (1990) is the Johnson and Johnson model. This model identifies the decisions involved in planning a cooperative learning group lesson: selecting the tasks, determining the content and accepted performance level, and selecting the social skills students should practice and learn. Size of group, heterogenous representation, and structuring of the tasks are also important elements to consider in the implementation of cooperative learning. Managing the classroom--observing group interactions and activities, providing feedback and reinforcement, and promoting group independence and accountability-may require new skills on the part of the teacher.

This Trends and Issues Alert lists resources that provide information about cooperative learning that can be used by instructors and administrators who are looking to make changes in the way students are taught and instruction is delivered.

### **Print Resources**

Barbour, Dennis H. "Collaborative Writing in the Business Writing Classroom: An Ethical Dilemma for the Teacher." Bulletin of the Association for Business Communication 53, no. 3 (September 1990): 33-35. (EJ 414 709).

The importance of collaborative work and writing as preparation for employment is discussed. The article also explores ethical problems with the collaborative approach and describes practical solutions to those problems.

Bruening, Thomas. "Cooperative Learning as a Teaching Strategy." Agricultural Education Magazine 63, no. 3 (September 1990): 12-14. (EJ 412 689).

Discusses models for cooperative learning and applications in agricultural education.

Carroll, E. Ruth. "Improved Interpersonal Relationships: A Result of Group Learning." Journal of Business and Technical Communication 5, no. 3 (July 1991): 285-299. (EJ 426 934).

This article suggests procedures for structuring and implementing cooperative learning groups and gives support to the notion that cooperative learning is more effective than straight lecture.

Carson, Laura. Cooperative Learning in the Home Economics Classroom." Journal of Home Economics 82, no. 4 (Winter 1990): 37-41. (EJ 417 737).

Cooperative learning is presented as a strategy for helping students work successfully alone as well as in competition and cooperation with others.

EDICATIONAL RESQUECES INFORMATION CENTER GENCI

# Cooperative Learning: The Magazine for Cooperation in Education.

Published by the International Association for the Study of Cooperative Education, P.O. Box 1582, Santa Cruz, CA 95061-1582 (408/429-7926).

Dishon, Dee, and O'Leary, Pat W. A Guidebook for Cooperative Learning: A Technique for Creating More Effective Schools. Holmes Beach, FL: Learning Publications, Inc., 1984.

Presents a model for planning and implementing cooperative learning in the classroom, including lesson planning, the teacher's role, and social skills development. Appendices contain worksheets, forms, and samples of activities and lesson plans.

Drew, Claudine Paula. "Are You Spoon-Feeding Your Students? A Paper on Facilitating a Collaborative Learning Experience." Paper presented at the Annual Meeting of the Merced County Community College on Student Retention in Two-Year Colleges, Trenton, NJ, May 1990. (ED 324 046).

To curb high first-year attrition rates and motivate active participation in learning, Bergen Community College implemented a program of peer teaching-learning and group inquiry strategies in a preclinical dental hygiene course. Peer involvement diminished competitiveness, fostered professional partnerships, reduced anxiety, increased motivation, and facilitated active involvement in the learning process.

Greene, Gary, and others. Instructional Strategies for Special Education Students in Regular Vocational Classes. Sacramento: California Department of Education, 1988. (ED 302 013).

Provides detailed descriptions of cooperative learning in vocational settings, with a summary of research, implementation considerations, and information sources.

Hall, Richard H., and others. "The Role of Individual Differences in the Cooperative Learning of Technical Material." *Journal of Educational Psychology* 80, no. 2 (June 1988): 172-178. (EJ 388 081).

Individual differences in the recall of procedural and structural/functional information was investigated in situations in which students studied in dyads or alone. Dyadic study proved more effective than studying alone for the 303 undergraduates studied.

Johnson, D. W., and Johnson, R. T. Learning Together and Alone. 3d cd. Englewood Cliffs, NJ: Prentice-Hal., 1991.

Presents the Learning Together/Circles of Learning Model, identifies five essential elements of cooperative learning, and suggests steps for structuring it in the classroom.

Jones, Karen H., ed. Career Education for Transition. Athens: Department of Vocational Education, University of Georgia, 1990. (ED 330 152).

Teachers describe their experiences using cooperative learning with special education students in business, electronics, home economics, and industrial arts in technical institutes and middle schools.

Kubota, Kenichi. "Applying a Collaborative Learning Model to a Course Development Project." Paper presented at the Annual Convention of the Association for Educational Communications and Technology, Orlando, FL, February 1991. (ED 331 490).

Presents the results of a qualitative study of the interaction between computer-assisted instruction and cooperative learning. The constructivist perspective is discussed in relation to other learning theories and is emphasized as the theoretical basis for the study because of its focus on prior learning, student characteristics, and the changing role of the teacher.

Long, Gilbert A. "Cooperative Learning: A New Approach." Journal of Agricultural Education 30, no. 2 (Summer 1989): 2-9. (EJ 390 128).

Cooperative learning is an effective strategy for involving students grouped in teams in working together toward a common goal. It is a way of increasing discussion and critical thinking without sacrificing achievement.

Nemko, Barbara, and Feichtner, Sheila H. Teaching Disadvantaged Students: Successful Strategies in Career-Vocational Education. Rohnert Park: California Institute on Human Services, Sonoma State University, 1990. (ED 333 186).

With examples from home economics, business, and distributive education, one chapter discusses using cooperative learning to help students function as a team, acquire content knowledge, and gain different perspectives on a problem.

Putnam, JoAnne W., and Markovchick, Kathryn. "Cooperative Learning and Cooperative Staff Development to Promote Social Integration." In Education and the Changing Rural Community: Anticipating the 21st Century. Proceedings of the 1989 ACRES/NRSSC Symposium. Bellingham, WA: National Rural and Small Schools Consortium; American Council on Rural Special Education, 1989. (ED 315 228).

Reports on a cooperative group learning project for 417 middle/junior high school students, including 41 special education students.

This Trends and Issues Alert was developed in 1992 by Bettins A. Lankard with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract no. RI88062005. Oninions expressed do not necessarily reflect the position or policies of OERI or the Department. Trends and Issues Alerts may be freely reproduced.



ERIC Full Text Provided by ERIC

THE RESERVE THE PROPERTY OF THE PARTY OF THE